

Claims

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1. Payment transaction method between a customer with a portable mobile device (1) and a service point (5), in which payment transaction method a payment terminal (2) of the service point (5) determines a total transaction amount to be paid and a transaction identification assigned to this total transaction amount, and informs the customer about the total transaction amount and the transaction identification, and in which payment transaction method the customer enters the transaction identification into the mobile device (1), wherein
 - the payment terminal (2), during determination of the transaction identification, adds a payment terminal identification to the transaction identification, which payment terminal identification makes it possible to identify the respective payment terminal (2) from a plurality of payment terminals (2) existing at the service point (5),
 - the mobile device (1) transmits, via a contactless device interface (11), the transaction identification, entered by the customer, to the payment terminal (2) identified by the payment terminal identification,
 - the payment terminal (2), after receipt of the transaction identification, transmits a payment request, which comprises at least one service point identification, the payment terminal identification and the total transaction amount, via the contactless device interface (21) to the mobile device (1), and in the mobile device (1) a payment record is prepared, which contains a linking of the payment request to a customer identification of the customer, and is transmitted from the mobile device (1) via the contactless device interface (11) to the payment terminal (2).
2. Payment transaction method according to claim 1, wherein during the transmission of the transaction identification, entered by the customer, from the mobile device (1) to the payment terminal (2) a sender identification is co-transmitted, and wherein the payment terminal (2) transmits the payment request to the mobile device (1) established through the sender identification.

3. Payment transaction method according to ~~one of the claims 1 or 2~~,
 wherein the payment terminal (2) increases the transmitting power of the
 contactless device interface (21) at least once, and transmits the payment
 request with the increased transmitting power to the mobile device (1), if the
 5 payment terminal (2) has not received any payment record from the mobile
 device (1) within a predefined time period from the transmission of the payment
 request without power increase to the mobile device (1).

4. Payment transaction method according to ~~one of the claims 1 to 3~~,
 wherein in the mobile device (1) data about the type of payment are added to
 10 the payment record before transmission of the payment record to the payment
 terminal (2).

5. Payment transaction method according to ~~one of the claims 1 to 4~~,
 wherein the customer is identified at his mobile device with a biometric feature
 before entering of the transaction identification.

6. Payment transaction system comprising a plurality of portable mobile
 devices (1) and a plurality of payment terminals (2) at a service point (5), which
 mobile devices (1) and payment terminals (2) each comprise at least one
 processor (16, 26) and one contactless device interface (11, 21) via which
 contactless device interface (11) the mobile devices (1) can communicate with
 20 the payment terminals (2), which payment terminals (2) each comprise means
 (29) of informing a customer about a total transaction amount to be paid of a
 payment transaction and a transaction identification assigned to this payment
 transaction,

which payment terminals (2) each comprise a transaction identification
 25 module (22), which transaction identification module (22) in each case
 determines the transaction identification for a payment transaction, and in each
 case adds a payment terminal identification for the respective payment terminal
 (2) to the transaction identification,

which mobile devices (1) each comprise a transaction response module
 30 (13), which transaction response module (13) receives a transaction

identification entered by a customer by means of operating elements (18) of the respective mobile device (1) and transmits it via the contactless device interface (11) to the payment terminal (2) determined through the payment terminal identification contained in the transaction identification,

5 which payment terminals (2) each comprise a payment request module (23), which payment request module (23), after receipt of a transaction identification from a mobile device (1), transmits a payment request, comprising at least one service point identification of the service point (5), the payment terminal identification of the respective payment terminal (2) and the total
10 transaction amount of the payment transaction, determined through the received transaction identification, via the contactless device interface (21) to the mobile device (1) from which the transaction identification was received, and

which mobile devices (1) each comprise a payment record module (14)
15 which payment record module (14) prepares a payment record comprising a payment request, received by the mobile device (1) from a payment terminal (2), and a customer identification of the respective customer, and transmits the prepared payment record via the contactless device interface (11) to the payment terminal (2) from which the payment request was received.

20 7. System according to claim 6 wherein the mobile devices (1) each comprise means to co-transmit a sender identification when transmitting the transaction identification, entered by the customer, to the payment terminal (2) and wherein the payment request module (23) comprises means to transmit the payment request to the mobile device (1) determined through the sender
25 identification.

30 8. System according to ~~one of the claims 6 or 7~~, wherein the payment terminals (2) each comprise means to increase the transmitting power of the contactless device interface (21), wherein the payment request module (23) comprises means to transmit the payment request with increased transmitting power to a respective mobile device (1) if the payment terminal (2) has not

received a payment record from the respective mobile device (1) within a predefined time period from transmission of the payment request without power increase to the respective mobile device (1).

C2d 5 9. System according to one of the claims 6 to 8, wherein the payment record module (14) comprises means to add to the payment record data on the type of payment before the transmission of the payment record to a payment terminal (2).

10 10. System according to one of the claims 6 to 9, wherein the mobile devices (1) each comprise an authentication module (12) to receive at least one biometric feature from a customer and to authenticate the customer on the basis of the received biometric feature.

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